Status of BESS-Polar Aerogel Cherenkov Counter

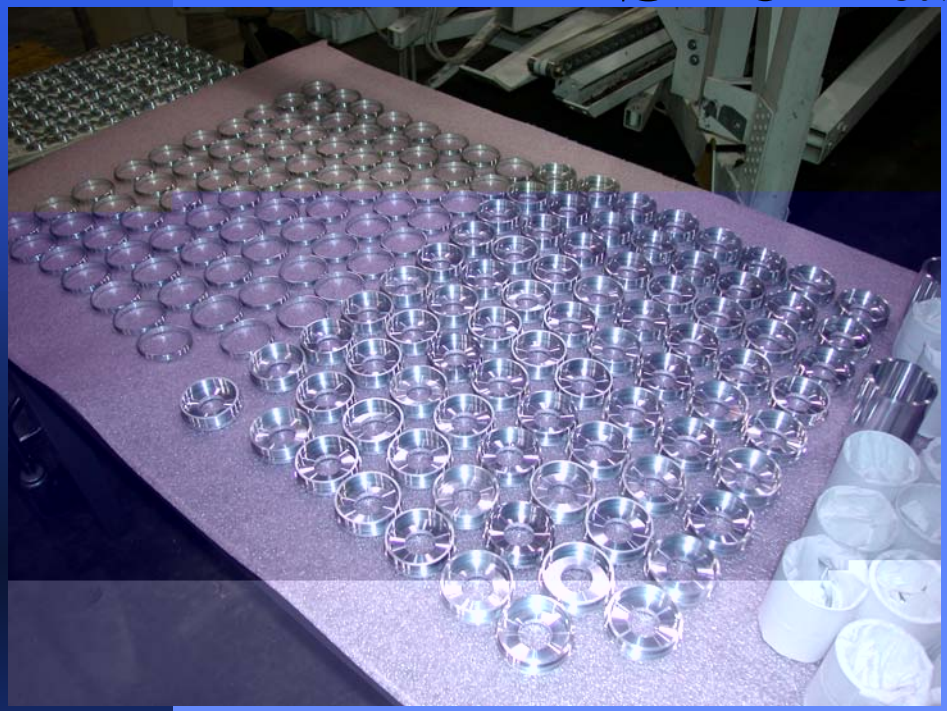
T. Hams (GSFC)

for the Video Conference
on 03/13/03 at 6:00 p.m. (EST)

Items

- Status of ACC PMT the shell assembly
- Progress of the ACC Counter design
- open issues

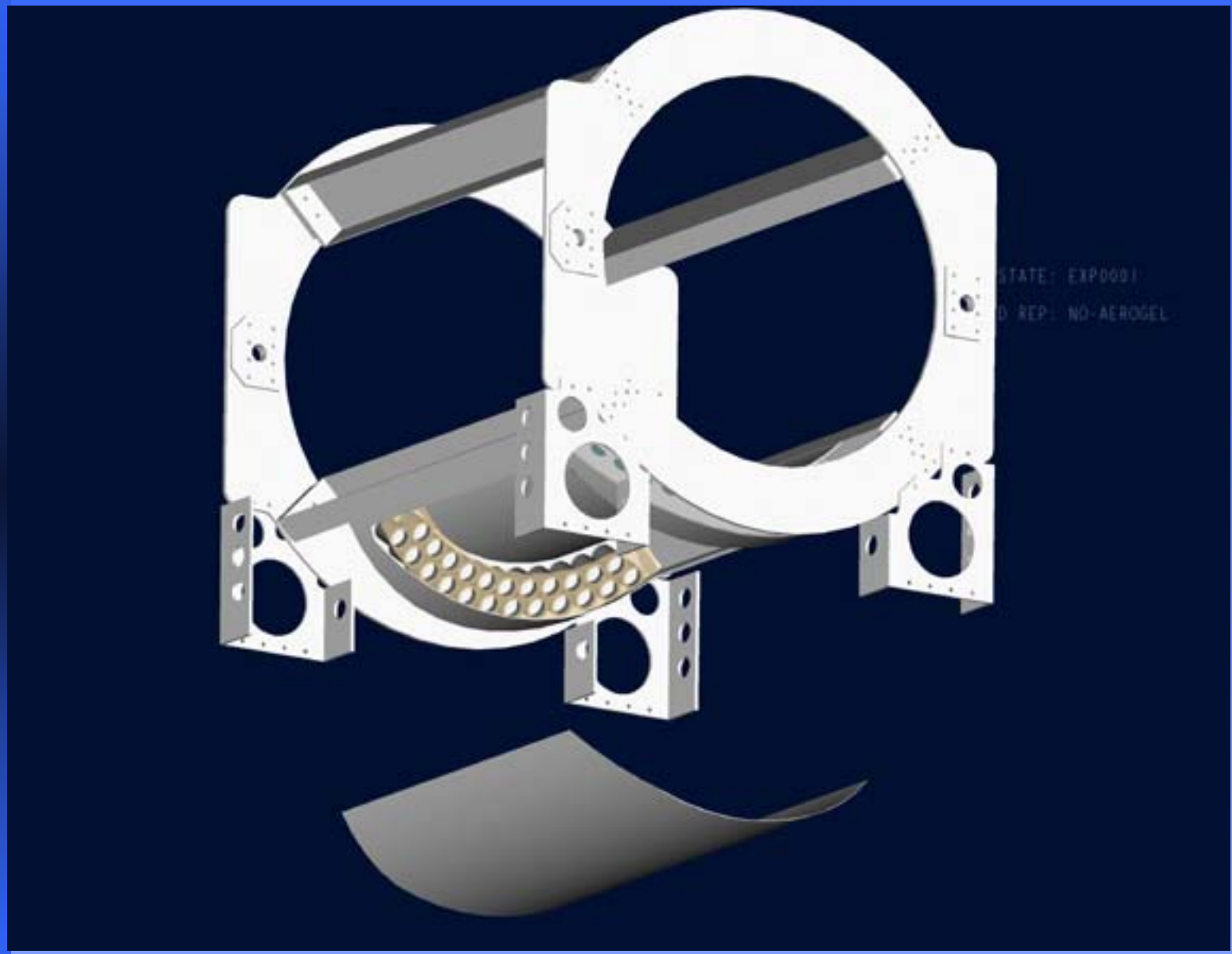
Shell assembly

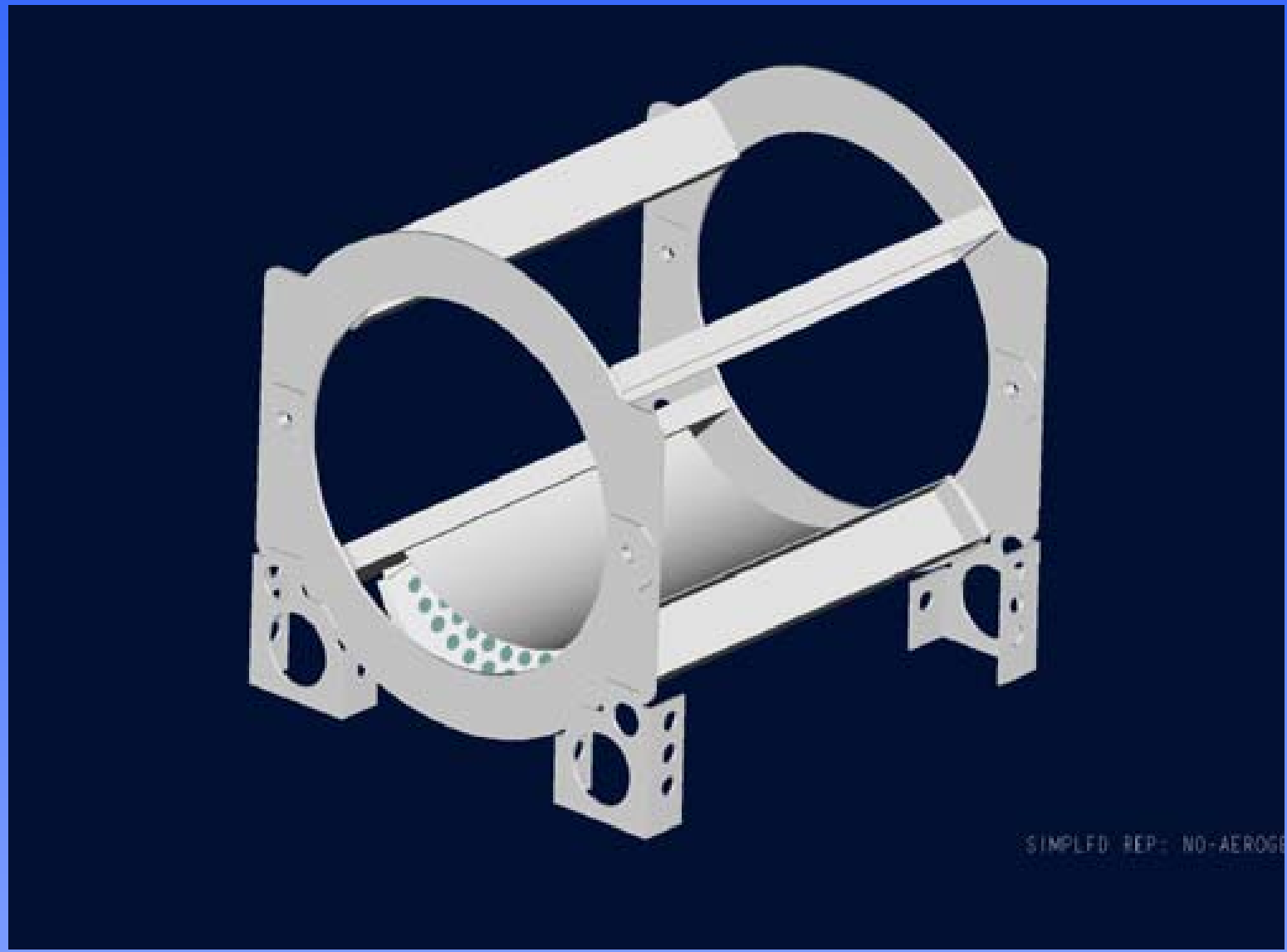


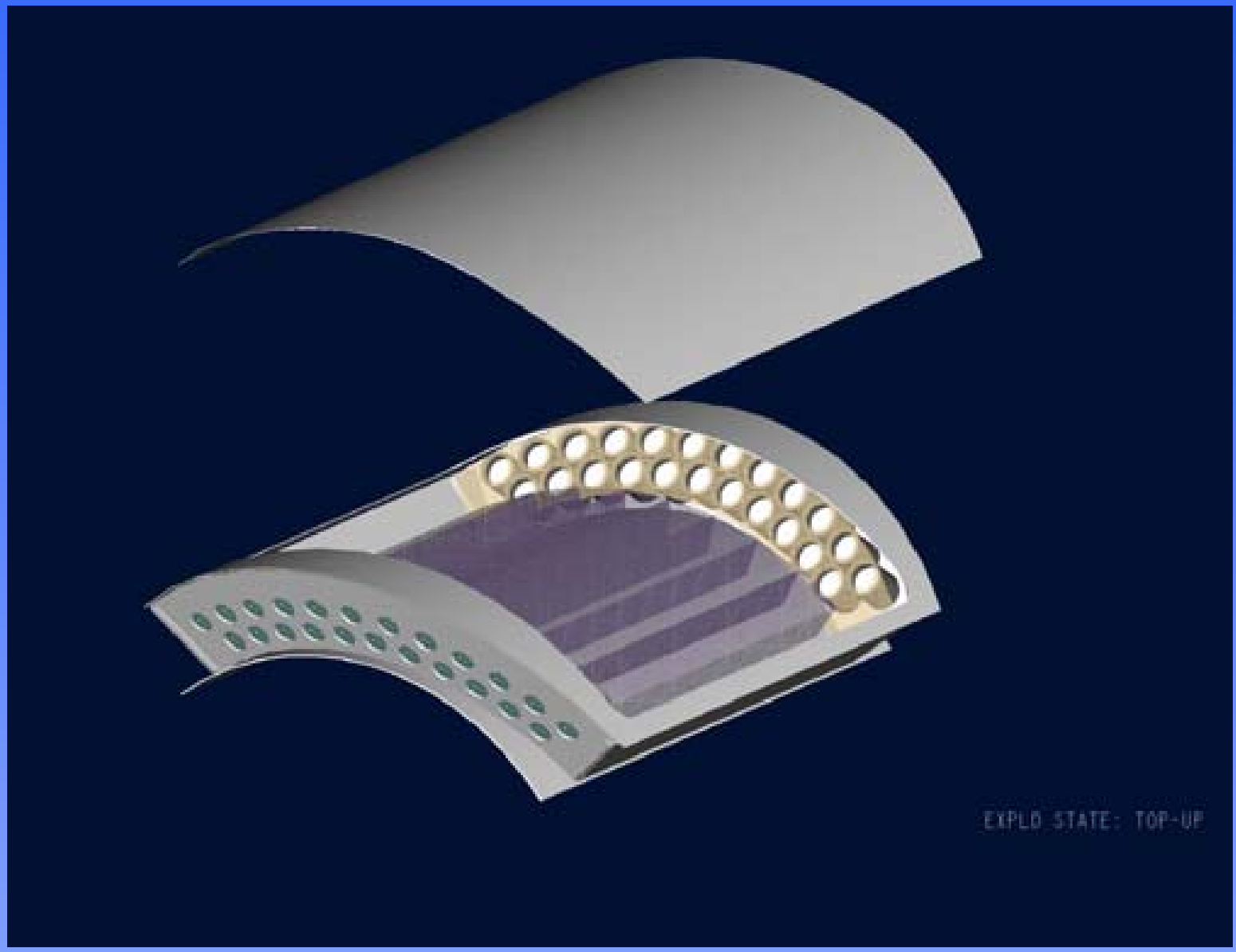
- finished all mechanical part for 80 shell assemblies
- PMT bases are build. Final testing and soldering to the PMT is in process.
- In parallel, start wiring the connector caps.

Design of the Cherenkov Box

- Fill the space between the c-channel with the Cherenkov counter box. This will reduce the amount of matter in the sensitive area of of the instrument. If required reflective volume in box can be constrained (preparing simulation).
- Mounting plate of the PMT shell will be the boundary of the light tight volume, thus no need for light-tight cable feed-through. If required opaque foil can be used to block direct light exposure.
- The PMT mounting plate and walls along the c-channel define main mechanical structure (welded). Top and bottom lid are removable and light-tightened with a gasket.


STATE: EXP009
REP: NO-AEROGEL


SIMPLFD REP: NO-AEROG


EXPLO STATE: TOP-UP

Open issues

- Narrow down location of the HV supplies on the c-channel and thus defining the required cable length for the ACC HV cable.
- Could we received wrapped samples of aerogel (from previous experiments)